

# HTML Quick Course



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## INTRODUCTION

HyperText Markup Language (HTML) is a way of adding various attributes to plain text files which are published on the World Wide Web. HTML lets you mix graphics with text, change the appearance of text, and create hypertext documents which interact with the user.

HTML is based around the concept of "tags". A tag looks like this: `<B>`. Most HTML functions have an opening and closing tag - the tag applies to all text in between. For example, `<B>` is the tag for "bold". Any text between a `<B>` and a `</B>` will be displayed in bold type when the document is viewed by the appropriate browser. So `<B>hello world</B>` would be displayed as **hello world**.

To create an HTML document you can use any text editor, such as Notepad, for example, or special HTML editors. To view it you have to have a Web browser, such as Netscape Navigator, MS Internet Explorer, Mosaic, etc.

## HTML TAGS

### ***GENERAL (all HTML documents should have this)***

`<HTML> </HTML>`

Document type

This element identifies the document as containing HTML elements. The format is:

```
<HTML>
Here is all the rest of the document, including any elements.
</HTML>
```

The HTML element is not visible upon HTML user agent rendering and can contain only the `<HEAD>` and `<BODY>` elements.

`<HEAD> </HEAD>`

Header

The head of an HTML document is an unordered collection of information about the document. It requires the Title element between `<HEAD>` and `</HEAD>` elements thus :

```
<HEAD>
<TITLE> Introduction to HTML </TITLE>
</HEAD>
```

The <HEAD> and </HEAD> elements do not directly affect the look of the document when rendered.

<TITLE> </TITLE>

Title

Every HTML document must have a Title element. The title should identify the contents of the document and in a global context, and may be used in history lists and as a label for the windows displaying the document. Unlike headings, titles are not typically rendered in the text of a document itself.

The Title element must occur within the head of the document and may not contain anchors, paragraph elements, or highlighting. Only one title is allowed in a document.

NOTE : The length of a title is not limited, however, long titles may be truncated in some applications. To minimize the possibility, titles should be fewer than 64 characters. Also keep in mind that a short title, such as "Introduction" may be meaningless out of context. An example of a meaningful title might be "Introduction to HTML elements"

<BODY> </BODY>

Body

The body of an HTML document contains all the text and images that make up the page, together with all the HTML elements that provide the control/formatting of the page. The format is :

```
<BODY>
The document included here
</BODY>
```

The <BODY> and </BODY> elements do not directly affect the look of the document when rendered, although they are required in order for the document to conform to the specification standard.

Recent versions of the proposed HTML 3.0 spec. have added a BACKGROUND attribute to the BODY element. The purpose of this attribute is to specify a URL pointing to an image that is to be used as a background for the document. In Netscape , this background image is used to tile the full background of the document-viewing area. Thus specifying:

```
<BODY BACKGROUND="URL or path/filename.gif">
Document here
</BODY>
```

would cause whatever text, images, etc. appeared in that document to be placed on a background consisting of the (filename.gif) graphics file being tiled to cover the viewing area, much like bitmaps are used for Windows wallpaper.

NOTE : This is included in the HTML 3.0 specification, but at present is only supported by Netscape 1.1 and above. While Netscape would use the file as a background, other browsers would not.

#### The BGCOLOR attribute

This attribute to BODY is not currently in the proposed HTML 3.0 specification, but is supported by Netscape 1.1 and above and is being considered for inclusion in the HTML 3.0 spec. Essentially, it changes the color of the background without having to specify a separate image that requires another network access to load. The format that Netscape 1.1 understands is:

```
<BODY BGCOLOR="#rrggbb">
Document here
</BODY>
```

Where "#rrggbb" is a hexadecimal red-green-blue triplet used to specify the background color. See the Color Table for examples of colors together with their #rrggbb values.

Clearly, once the background colors/patterns have been changed, it will be necessary to also be able to control the foreground to establish the proper contrasts. The following attributes are also recognized as part of the BODY element by Netscape 1.1.

#### TEXT

This attribute is used to control the color of all the normal text in the document. This basically consists of all text that is not specially colored to indicate a link. The format of TEXT is the same as that of BGCOLOR.

```
<BODY TEXT="#rrggbb">
Document here
</BODY>
```

#### LINK, VLINK, and ALINK attributes

These attributes let you control the coloring of link text. VLINK stands for visited link, and ALINK stands for active link. The default coloring of these is: LINK=blue, VLINK=purple, and ALINK=red. Again, the format for these attributes is the same as that for BGCOLOR and TEXT.

```
<BODY LINK="#rrggbb" VLINK="#rrggbb" ALINK="#rrggbb">
Document here
</BODY>
```

#### Coloring Considerations.

Since these color controls are all attributes of the BODY element, they can only be set once for the entire document. Document color cannot be changed partially through a document.

Setting a background image requires the fetching of an image file from a second HTTP connection, it will slow down the perceived speed of document loading. None of the document can be displayed until the image is loaded and decoded. Needless to say, keep background images small.

If the Auto Load Images option is turned off, background images will not be loaded. If the background image is not loaded for any reason, and a BGCOLOR was not also specified, then any of the foreground controlling attributes (LINK, VLINK, and ALINK)

will be ignored. The idea behind this is that if the requested background image is unavailable, or not loaded, setting requested text colors on top of the default gray background may make the document unreadable.

## ***STRUCTURAL DEFINITION (appearance controlled by the browser's preference)***

`<H?> </H?>`

Heading

HTML defines six levels of heading. A Heading element implies all the font changes, paragraph breaks before and after, and white space necessary to render the heading.

The highest level of headings is `<H1>`, followed by `<H2>` ... `<H6>`.

Example of use:

```
<H1>This is a heading</H1>
Here is some text
<H2>Second level heading</H2>
Here is some more text.
```

The rendering of headings is determined by the HTML user agent, but typical renderings are:

`<H1> ... </H1>`

Bold, very-large font, centered. One or two blank lines above and below.

`<H2> ... </H2>`

Bold, large font, flush-left. One or two blank lines above and below.

`<H3> ... </H3>`

Italic, large font, slightly indented from the left margin. One or two blank lines above and below.

`<H4> ... </H4>`

Bold, normal font, indented more than H3. One blank line above and below.

`<H5> ... </H5>`

Italic, normal font, indented as H4. One blank line above.

`<H6> ... </H6>`

Bold, indented same as normal text, more than H5. One blank line above.

Although heading levels can be skipped (for example, from H1 to H3), this practice is discouraged as skipping heading levels may produce unpredictable results when generating other representations from HTML.

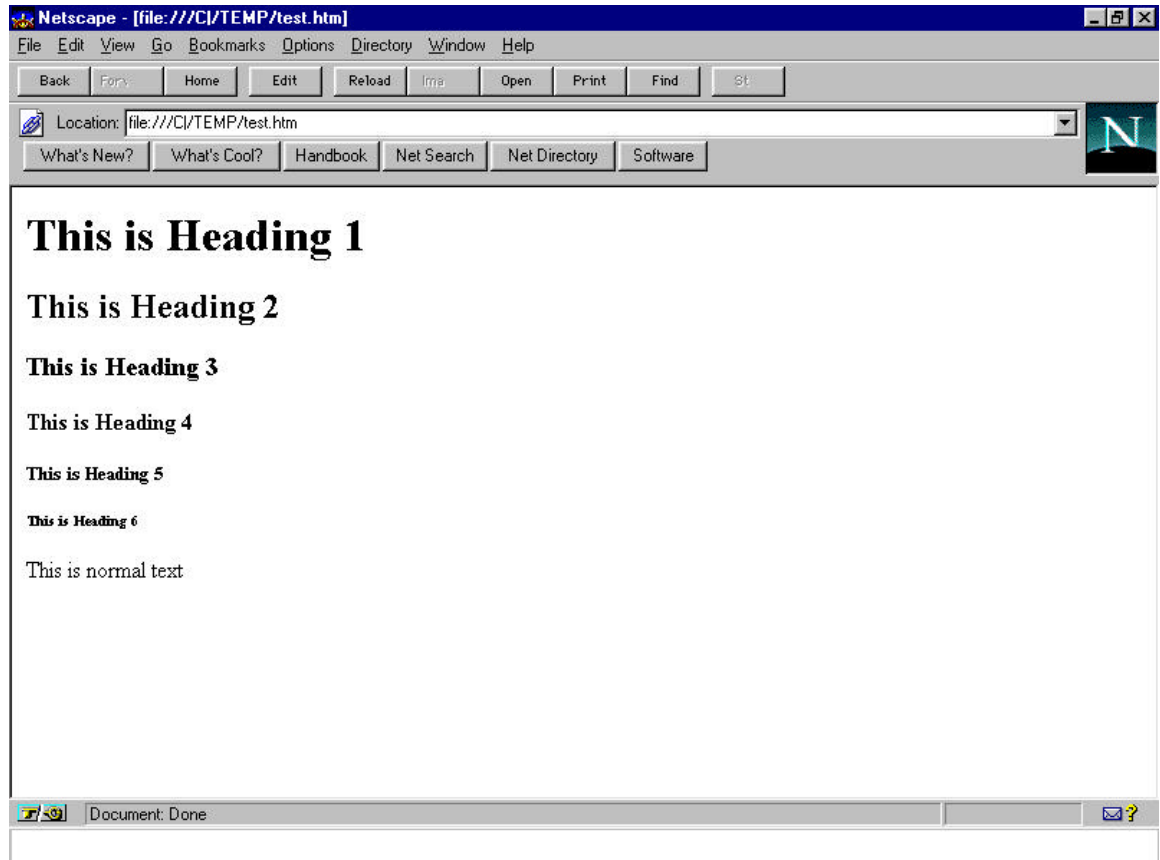


Fig. 1 Screenshot of Netscape heading rendering, using a default installation.  
HTML document is:

```
<HTML><HEAD><TITLE>Heading test</TITLE></HEAD>
<BODY>
<H1>This is Heading 1</H1>
<H2>This is Heading 2</H2>
<H3>This is Heading 3</H3>
<H4>This is Heading 4</H4>
<H5>This is Heading 5</H5>
<H6>This is Heading 6</H6>
This is normal text
</BODY></HTML>
```

## **<BLOCKQUOTE> </BLOCKQUOTE>    Block Quote**

The Blockquote element is used to contain text quoted from another source.

A typical rendering might be a slight extra left and right indent, and/or italic font. The Blockquote element causes a paragraph break, and typically provides space above and below the quote.

Single-font rendition may reflect the quotation style of Internet mail by putting a vertical line of graphic characters, such as the greater than symbol (>), in the left margin.

Example of use:

```
I think the poem ends
<BLOCKQUOTE>
<P>Soft you now, the fair Ophelia. Nymph, in thy orisons, be all my sins
remembered. </BLOCKQUOTE> but I am not sure.
```

<EM> </EM>

## Emphasis

The Emphasis element indicates typographic emphasis, typically rendered as italics.

e.g.: The <EM>Emphasis</EM> element typically renders as Italics.  
would render :

The *Emphasis* element typically render as Italics.

<STRONG> </STRONG>

## Strong Emphasis

The Strong element indicates strong typographic emphasis, typically rendered in bold.

e.g.: The instructions <STRONG>must be read</STRONG> before continuing.  
would be rendered as :

The instructions **must be read** before continuing.

<ADDRESS> </ADDRESS>

## Author's Address

The Address element specifies such information as address, signature and authorship, often at the top or bottom of a document.

Typically, an Address is rendered in an italic typeface and may be indented. The Address element implies a paragraph break before and after.

Example of use:

```
<ADDRESS>
Newsletter editor<BR>
J.R. Brown<BR>
JimquickPost News, Jumquick, CT 01234<BR>
Tel (123) 456 7890
</ADDRESS>
```



## PRESENTATION FORMATTING

`<B> </B>`

**Bold**

The Bold element specifies that the text should be rendered in boldface, where available. Otherwise, alternative mapping is allowed.

e.g.: The instructions `<B>must be read</B>` before continuing.  
would be rendered as :

The instructions **must be** read before continuing.

`<I> </I>`

**Italic**

The Italic element specifies that the text should be rendered in italic font, where available. Otherwise, alternative mapping is allowed.

e.g.: Anything between the `<I>I` elements`</I>` should be italics.  
would render as :

Anything between the *I elements* should be italics.

`<TT> </TT>`

**Typewriter**

The Teletype element specifies that the text should be rendered in fixed-width typewriter font.

e.g.: Text between the `<TT>` typetype elements`</TT>` should be rendered in fixed width typewriter font.  
would render as :

Text between the typetype elements should be rendered in fixed width typewriter font.

`<PRE> </PRE>`

**Preformatted**

The Preformatted Text element presents blocks of text in fixed-width font, and so is suitable for text that has been formatted on screen.

The `<PRE>` element may be used with the optional WIDTH attribute, which is a Level 1 feature. The WIDTH attribute specifies the maximum number of characters for a line and allows the HTML user agent to select a suitable font and indentation. If the WIDTH attribute is not present, a width of 80 characters is assumed. Where the WIDTH attribute

is supported, widths of 40, 80 and 132 characters should be presented optimally, with other widths being rounded up.

Within preformatted text:

- Line breaks within the text are rendered as a move to the beginning of the next line.
- The <P> element should not be used. If found, it should be rendered as a move to the beginning of the next line.
- Anchor elements and character highlighting elements may be used.
- Elements that define paragraph formatting (headings, address, etc.) must not be used.
- The horizontal tab character (encoded in US-ASCII and ISO-8859-1 as decimal 9) must be interpreted as the smallest positive nonzero number of spaces which will leave the number of characters so far on the line as a multiple of 8. Its use is not recommended however.

NOTE: References to the "beginning of a new line" do not imply that the renderer is forbidden from using a constant left indent for rendering preformatted text. The left indent may be constrained by the width required.

Example of use:

```
<PRE WIDTH="80">
This is an example line.
</PRE>
```

NOTE: Within a Preformatted Text element, the constraint that the rendering must be on a fixed horizontal character pitch may limit or prevent the ability of the HTML user agent to render highlighting elements specially.

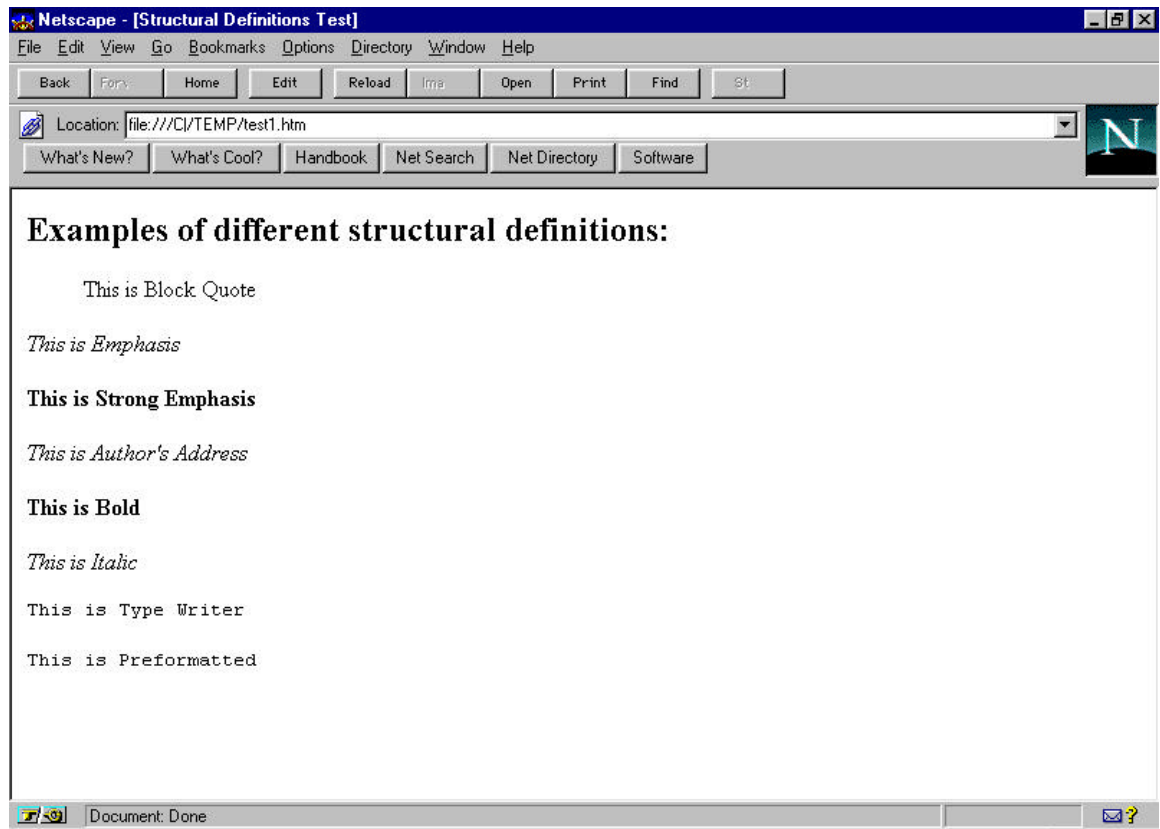


Fig. 2 Screenshot of Netscape. HTML document is:

```
<HTML><HEAD><TITLE>Structural Definitions Test</TITLE></HEAD>
<BODY>
<H2>Examples of different structural definitions:</H2>

<BLOCKQUOTE>
<P>This is Block Quote
</BLOCKQUOTE>

<EM>
<P>This is Emphasis
</EM>

<STRONG>
<P>This is Strong Emphasis
</STRONG>

<ADDRESS>
<P>This is Author's Address
</ADDRESS>

<B>
<P>This is Bold
</B>

<I>
<P>This is Italic
</I>

<TT>
<P>This is Type Writer
</TT>

<PRE>
```

```
<P>This is Preformatted
</PRE>
</BODY></HTML>
```

## <CENTER> </CENTER>

## Center

All lines of text between the begin and end of the <CENTER> element are centered between the current left and right margins. A new element has been introduced rather than using the proposed <P ALIGN= CENTER> because using <P ALIGN= CENTER> breaks many existing browsers when the <P> element is used as a container. The <P ALIGN= CENTER> element is also less general and does not support all cases where centering may be desired.

```
<CENTER>All this text would be centered in the page</CENTER>
```

## <BLINK> </BLINK>

## Blinking

Surrounding any text with this element will cause the selected text to blink on the viewing page. This can serve to add extra emphasis to selected text.

```
<BLINK>This text would blink on the page</BLINK>
```

## <FONT...> </FONT>

## Font

Netscape 1.0 and above supports different sized fonts within HTML documents. This should be distinguished from Headings.

The new element is <FONT SIZE=value>. Valid values range from 1-7. The default FONT size is 3. The value given to size can optionally have a “+” or “-” character in front of it to specify that it is relative to the document baseFONT. The default baseFONT is 3, and can be changed with the <BASEFONT SIZE ...> element.  
e.g.

```
<FONT SIZE=4> changes the font size to 4 </FONT>
<FONT SIZE=+2> changes the font size to <BASEFONT SIZE ...> + 2 </FONT>
<FONT COLOR=î#0000FFî>changes the font color to blue </FONT>
```

## <BASEFONT SIZE=?>

## Base Font Size

This changes the size of the BASEFONT that all relative <FONT SIZE ...> changes are based on. It defaults to 3, and has a valid range of 1-7.

e.g. <BASEFONT SIZE=5>

## LINKS AND GRAPHICS

`<A HREF=URL> </A>`

Anchor (Link Something)

An Anchor element is a marked text that is the start and/or destination of a hypertext link. Anchor elements are defined by the `<A>` element. The `<A>` element accepts several attributes, but either the NAME or HREF attribute is required.

Attributes of the `<A>` element :

### HREF

If the HREF attribute is present, the text between the opening and closing anchor elements becomes hypertext. If this hypertext is selected by readers, they are moved to another document, or to a different location in the current document, whose network address is defined by the value of the HREF attribute.

Example:

```
See <A HREF="http://www.hal.com/">HaL</A>'s information for more details.
```

In this example, selecting "HaL" takes the reader to a document located at `http://www.hal.com`. The format of the network address is specified in the URI specification for print readers.

With the HREF attribute, the form `HREF="#identifier"` can refer to another anchor in the same document.

Example :

```
The <A HREF="document.html#glossary">glossary</A> defines terms used in the document.
```

In this example, selecting "glossary" takes the reader to another anchor (i.e. `<A NAME="glossary">Glossary</A>`) in the same document (document.html). The NAME attribute is described below. If the anchor is in another document, the HREF attribute may be relative to the document's address or the specified base address.

### NAME

If present, the NAME attribute allows the anchor to be the target of a link. The value of the NAME attribute is an identifier for the anchor. Identifiers are arbitrary strings but must be unique within the HTML document.

Example of use:

```
<A NAME=coffee>Coffee</A> is an example of...  
An example of this is <A HREF=#coffee>coffee</A>.
```

Another document can then make a reference explicitly to this anchor by putting the identifier after the address, separated by a hash sign:

<A NAME=drinks.html#coffee>

#### TITLE

The Title attribute is informational only. If present, the Title attribute should provide the title of the document whose address is given by the HREF attribute.

The Title attribute is useful for at least two reasons. The HTML user agent may display the title of the document prior to retrieving it, for example, as a margin note or on a small box while the mouse is over the anchor, or while the document is being loaded. Another reason is that documents that are not marked up text, such as graphics, plain text and Gopher menus, do not have titles. The TITLE attribute can be used to provide a title to such documents. When using the TITLE attribute, the title should be valid and unique for the destination document.

#### REL

The REL attribute gives the relationship(s) described by the hypertext link from the anchor to the target. The value is a comma-separated list of relationship values. Values and their semantics will be registered by the HTML registration authority. The default relationship if none other is given is void. The REL attribute is only used when the HREF attribute is present.

#### REV

The REV attribute is the same as the REL attribute, but the semantics of the link type are in the reverse direction. A link from A to B with REL="X" expresses the same relationship as a link from B to A with REV="X". An anchor may have both REL and REV attributes.

#### URN

If present, the URN attribute specifies a uniform resource name (URN) for a target document. The format of URNs is under discussion (1994) by various working groups of the Internet Engineering Task Force.

#### METHODS

The METHODS attributes of anchors and links provide information about the functions that the user may perform on an object. These are more accurately given by the HTTP protocol when it is used, but it may, for similar reasons as for the TITLE attribute, be useful to include the information in advance in the link. For example, the HTML user agent may chose a different rendering as a function of the methods allowed; for example, something that is searchable may get a different icon.

The value of the METHODS attribute is a comma separated list of HTTP methods supported by the object for public use.

<IMG>

In-line images

The Image element is used to incorporate in-line graphics (typically icons or small graphics) into an HTML document. This element cannot be used for embedding other HTML text.

HTML user agents that cannot render in-line images ignore the Image element unless it contains the ALT attribute. Note that some HTML user agents can render linked graphics but not in-line graphics. If a graphic is essential, you may want to create a link to it rather than to put it in-line. If the graphic is not essential, then the Image element is appropriate.

The Image element, which is empty (no closing element), has these attributes:

#### ALIGN

The ALIGN attribute accepts the values TOP or MIDDLE or BOTTOM, which specifies if the following line of text is aligned with the top, middle, or bottom of the graphic.

#### ALT

Optional text as an alternative to the graphic for rendering in non-graphical environments. Alternate text should be provided whenever the graphic is not rendered. Alternate text is mandatory for Level 0 documents. Example of use:

```
<IMG SRC="triangle.gif" ALT="Warning:"> Be sure to read these instructions.
```

#### ISMAP

The ISMAP (is map) attribute identifies an image as an image map. Image maps are graphics in which certain regions are mapped to URLs. By clicking on different regions, different resources can be accessed from the same graphic. Example of use:

```
<A HREF="http://machine/htbin/imapemap/sample">  
<IMG SRC="sample.gif" ISMAP>  
</A>
```

NOTE : To be able to employ image maps in HTML documents, the HTTP server which will be controlling document access must have the correct cgi-bin software installed to control image map behaviour.

#### SRC

The value of the SRC attribute is the URL of the document to be embedded; only images can be embedded, not HTML text. Its syntax is the same as that of the HREF attribute of the <A> element. SRC is mandatory. Image elements are allowed within anchors.

Example of use:

```
<IMG SRC="triangle.gif">Be sure to read these instructions.
```

NOTE : The <IMG> element has received possibly the largest Netscape enhancement.

## Netscape extensions to <IMG...>

The <IMG ...> attribute is probably the most extended element.

<IMG ALIGN= left|right|top|texttop|middle|  
absmiddle|baseline|bottom|absbottom>

The additions to your ALIGN options needs a lot of explanation. First, the values "left" and "right". Images with those alignments are an entirely new floating image type.

ALIGN=left image will float the image down and over to the left margin (into the next available space there), and subsequent text will wrap around the right hand side of that image.

ALIGN=right will align the image aligns with the right margin, and the text wraps around the left.

ALIGN=top aligns itself with the top of the tallest item in the line.

ALIGN=texttop aligns itself with the top of the tallest text in the line (this is usually but not always the same as ALIGN=top).

ALIGN=middle aligns the baseline of the current line with the middle of the image.

ALIGN=absmiddle aligns the middle of the current line with the middle of the image.

ALIGN=baseline aligns the bottom of the image with the baseline of the current line.

ALIGN=bottom aligns the bottom of the image with the baseline of the current line.

ALIGN=absbottom aligns the bottom of the image with the bottom of the current line.

<IMG WIDTH=value HEIGHT=value>

The WIDTH and HEIGHT attributes were added to <IMG ...> mainly to speed up display of the document. If the author specifies these, the viewer of their document will not have to wait for the image to be loaded over the network and its size calculated.

<IMG BORDER=value>

This lets the document author control the thickness of the border around an image displayed.

Warning: setting BORDER=0 on images that are also part of anchors may confuse your users as they are used to a colored border indicating an image is an anchor.

<IMG VSPACE=value HSPACE=value>

For the floating images it is likely that the author does not want them pressing up against the text wrapped around the image. VSPACE controls the vertical space above and below the image, while HSPACE controls the horizontal space to the left and right of the image.

LOWSRC



Using the LOWSRC attribute, it is possible to use two images in the same space. The syntax is :

```
<IMG SRC="highres.gif" LOWSRC="lowres.jpg">
```

Browsers that do not recognize the LOWSRC attribute cleanly ignore it and simply load the image called "highres.gif".

The Netscape Navigator, on the other hand, will load the image called "lowres.jpg" on its first layout pass through the document. Then, when the document and all of its images are fully loaded, the Netscape Navigator will do a second pass through and load the image called "highres.gif" in place. This means that you can have a very low-resolution version of an image loaded initially; if the user stays on the page after the initial layout phase, a higher-resolution (and presumably bigger) version of the same image can "fade in" and replace it.

Both GIF (both normal and interlaced) and JPEG images can be freely interchanged using this method. You can also specify width and/or height values in the IMG element, and both the high-res and low-res versions of the image will be appropriately scaled to match.

If the images are of different sizes and a fixed height and width are not specified in the IMG element, the second image (the image specified by the SRC attribute) will be scaled to the dimensions of the first (LOWSRC) image. This is because by the time the Netscape Navigator knows the dimensions of the second image, the first image has already been displayed in the document at its normal dimensions.

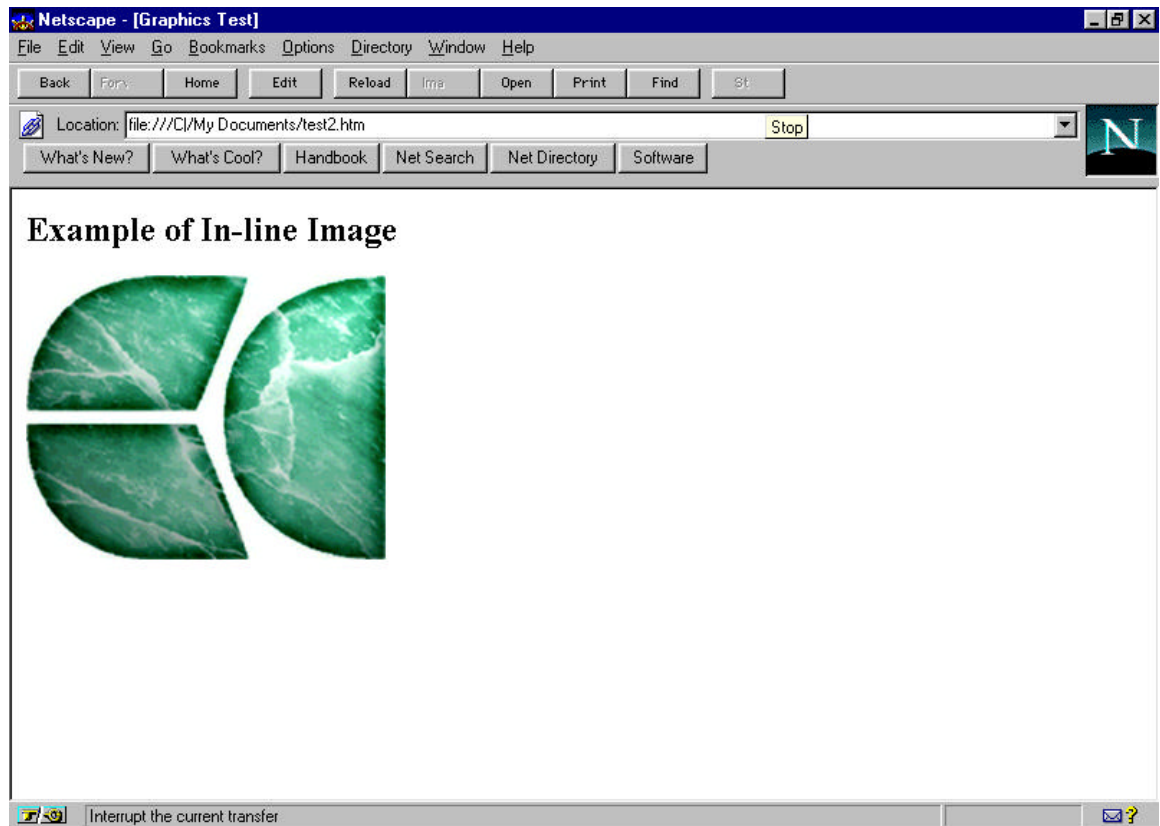


Fig. 3 Screenshot of Netscape. HTML document is:

```
<HTML><HEAD><TITLE>Graphics Test</TITLE></HEAD>
<BODY>
<H2>Example of In-line Image</H2>

<IMG SRC="KCLOGO.JPG">

</BODY></HTML>
```

## ***DIVIDERS***

<P>

### **Paragraph**

The Paragraph element indicates a paragraph. The exact indentation, leading, etc. of a paragraph is not defined and may be a function of other elements, style sheets, etc.

Typically, paragraphs are surrounded by a vertical space of one line or half a line. This is typically not the case within the Address element and or is never the case within the Preformatted Text element. With some HTML user agents, the first line in a paragraph is indented.

Example of use:

```
<H1>This Heading Precedes the Paragraph</H1>
<P>This is the text of the first paragraph.
<P>This is the text of the second paragraph. Although you do not need to
start paragraphs on new lines, maintaining this convention facilitates
document maintenance.
<P>This is the text of a third paragraph.
```

Included in the proposed HTML level 3.0 specification is the ability to align paragraphs. Basically, ALIGN=left|center|right attributes have been added to the <P> element.  
e.g :

```
<P ALIGN=LEFT> ... </P>
```

All text within the paragraph will be aligned to the left side of the page layout. This setting is equal to the default <P> element.

```
<P ALIGN=CENTER> ... </P>
```

All text within the paragraph will be aligned to the center of the page.

```
<P ALIGN=RIGHT> ... </P>
```

All text will be aligned to the right side of the page.

NOTE: To account for the commonly used yet non-standard <CENTER> element, Mosaic (2.0b4) will change the default ALIGN=LEFT attribute of all paragraph and header elements to ALIGN=CENTER until a </CENTER> element is read. Mosaic will also allow internally defined alignment attributes to take precedence over a wrapping CENTER element. Mosaic authors would like to encourage all HTML authors to conform to the HTML 3.0 way of centering HTML and no longer use the non-standard <CENTER> element.

## <BR>

## Line Break

The Line Break element specifies that a new line must be started at the given point. A new line indents the same as that of line-wrapped text.

Example of use:

```
<P>
Pease porridge hot<BR>
Pease porridge cold<BR>
Pease porridge in the pot<BR>
Nine days old.
```

NOTE : The <BR> element has been Netscape enhanced.

With the addition of floating images, it was necessary to expand the <BR> element. Normal <BR> still just inserts a line break. A CLEAR attribute has been added to <BR>, so :

CLEAR=left will break the line, and move vertically down until you have a clear left margin (no floating images).  
CLEAR=right does the same for the right margin.  
CLEAR=all moves down until both margins are clear of images.

NOTE : The screenshots on the Netscape extensions to <IMG> pages use <BR CLEAR=left> and <BR CLEAR=right> respectively.

## <HR>

## Horizontal Rule

A Horizontal Rule element is a divider between sections of text such as a full width horizontal rule or equivalent graphic.

Example of use:

```
<HR>
<ADDRESS>February 8, 1995, CERN</ADDRESS>
</BODY>
```

NOTE : The <HR> element has been Netscape Enhanced

The <HR> element specifies that a horizontal rule of some sort (The default being a shaded engraved line) be drawn across the page. To this element Netscape have added 4 new attributes which allow the document author to describe how the horizontal rule should look.

<HR SIZE=number>

The SIZE attribute lets the author give an indication of how thick they wish the horizontal rule to be.

<HR WIDTH=number|percent>

The default horizontal rule is always as wide as the page. With the WIDTH attribute, the author can specify an exact width in pixels, or a relative width measured in percent of document width.

<HR ALIGN=left|right|center>

Now that horizontal rules do not have to be the width of the page it is necessary to allow the author to specify whether they should be pushed up against the left margin, the right margin, or centered in the page.

<HR NOSHADE>

Finally, for those times when a solid bar is required, the NOSHADE attribute lets the author specify that the horizontal rule should not be shaded at all.

## <NOBR> </NOBR>

## No Break

The <NOBR> element stands for NO BReak. This means all the text between the start and end of the <NOBR> elements cannot have line breaks inserted. While <NOBR> is essential for those character sequences that don't want to be broken, please be careful; long text strings inside of <NOBR> elements can look rather odd. Especially if during viewing, the user adjust the page size by altering the window size.

## <WBR>

## Word Break

The <WBR> element stands for Word BReak. This is for the very rare case when a <NOBR> section requires an exact break. Also, it can be used any time the Netscape Navigator can be helped by telling it where a word is allowed to be broken. The <WBR> element does not force a line break (<BR> does that) it simply lets the Netscape Navigator know where a line break is allowed to be inserted if needed.

## LISTS

<UL> <LI> </UL>

### Unordered List

The Unordered List element is used to present a list of items which is typically separated by white space and/or marked by bullets.

An unordered list must begin with the <UL> element which is immediately followed by a <LI> (list item) element:

```
<UL>
<LI>First list item
<LI>Second list item
<LI>Third list item
</UL>
```

The Unordered List element can take the COMPACT attribute, which suggests that a compact rendering be used.

NOTE : The <UL> element has been Netscape enhanced

The basic bulleted list has a default progression of bullet types that changes as you move through indented levels. From a solid disc, to a circle to a square. Netscape authors have added a TYPE attribute to the <UL> element so that no matter what the indent level the bullet type can be specified thus :

```
TYPE=disc
TYPE=circle
TYPE=square
```

<OL> <LI> </OL>

### Ordered List

The Ordered List element is used to present a numbered list of items, sorted by sequence or order of importance.

An ordered list must begin with the <OL> element which is immediately followed by a <LI> (list item) element:

```
<OL>
<LI>Click the Web button to open the Open the URL window.
<LI>Enter the URL number in the text field of the Open URL
window. The Web document you specified is displayed.
<LI>Click highlighted text to move from one link to another.
</OL>
```

The Ordered List element can take the COMPACT attribute, which suggests that a compact rendering be used.

NOTE : The <OL> element has been Netscape enhanced.

The average ordered list counts 1, 2, 3, ... etc. Netscape authors have added the TYPE attribute to this element to allow authors to specify whether the list items should be marked with:

(TYPE=A) - capital letters. e.g. A, B, C ...

(TYPE=a) - small letters. e.g. a, b, c ...

(TYPE=I) - large roman numerals. e.g. I, II, III ...

(TYPE=i) - small roman numerals. e.g. i, ii, iii ...

(TYPE=1) - or the default numbers. e.g. 1, 2, 3 ...

For lists that wish to start at values other than 1 the new attribute START is available.

START is always specified in the default numbers, and will be converted based on TYPE before display. Thus START=5 would display either an 'E', 'e', 'V', 'v', or '5' based on the TYPE attribute.

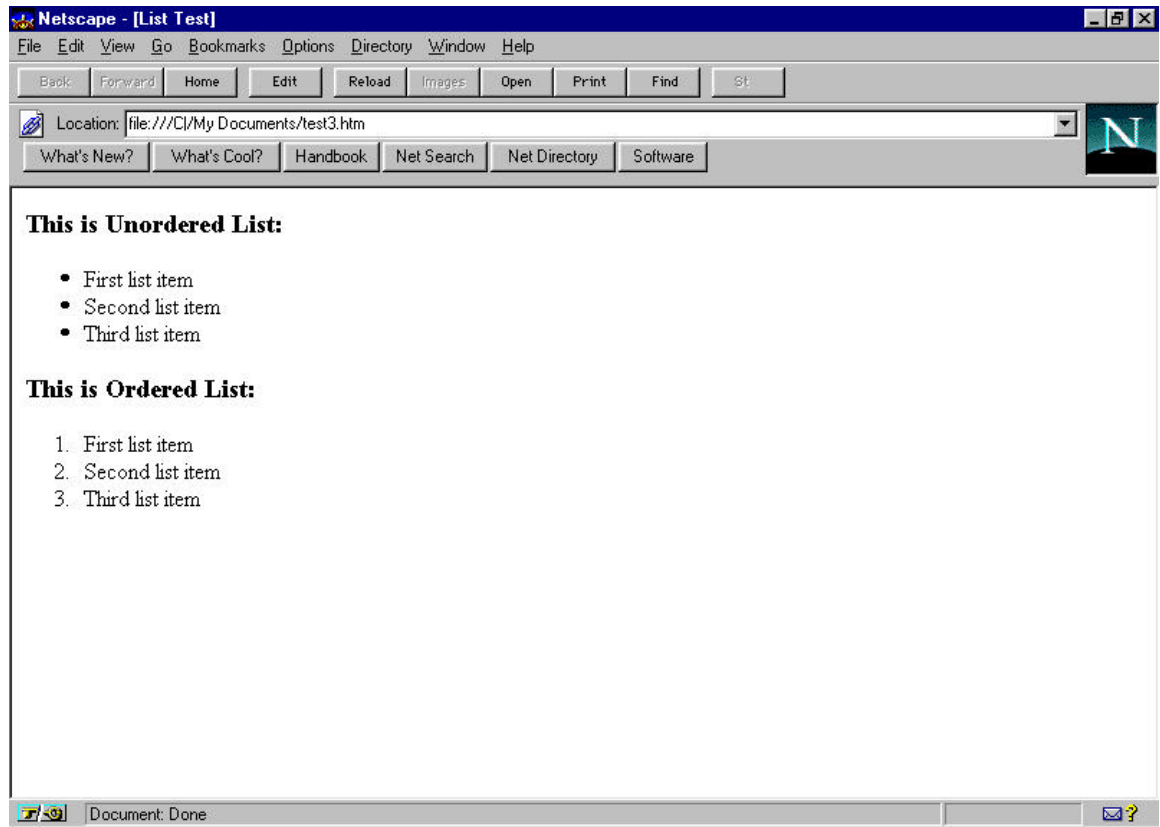


Fig. 4 Screenshot of Netscape. HTML document is:

```
<HTML><HEAD><TITLE>List Test</TITLE></HEAD>
<BODY>
<H3>This is Unordered List:</H3>
<UL>
<LI>First list item
<LI>Second list item
<LI>Third list item
</UL>

<H3>This is Ordered List:</H3>
<OL>
<LI>First list item
<LI>Second list item
<LI>Third list item
</OL>
</BODY></HTML>
```

`<DL> <DT> <DD> </DL>`

## Definition List

A definition list is a list of terms and corresponding definitions. Definition lists are typically formatted with the term flush-left and the definition, formatted paragraph style, indented after the term.

Example of use:

```
<DL>
<DT>Term<DD>This is the definition of the first term.
<DT>Term<DD>This is the definition of the second term.
</DL>
```

If the `<DT>` term does not fit in the `<DT>` column (one third of the display area), it may be extended across the page with the `<DD>` section moved to the next line, or it may be wrapped onto successive lines of the left hand column.

Single occurrences of a `<DT>` element without a subsequent `<DD>` element are allowed, and have the same significance as if the `<DD>` element had been present with no text.

The opening list element must be `<DL>` and must be immediately followed by the first term (`<DT>`).

The definition list type can take the `COMPACT` attribute, which suggests that a compact rendering be used, because the list items are small and/or the entire list is large.

Unless you provide the `COMPACT` attribute, the HTML user agent may leave white space between successive `<DT>`, `<DD>` pairs. The `COMPACT` attribute may also reduce the width of the left-hand (`<DT>`) column.

If using the `COMPACT` attribute, the opening list element must be `<DL COMPACT>`, which must be immediately followed by the first `<DT>` element:

```
<DL COMPACT>
<DT>Term<DD>This is the first definition in compact format.
<DT>Term<DD>This is the second definition in compact format.
</DL>
```

`<MENU> <LI> </MENU>`

## Menu List

A menu list is a list of items with typically one line per item. The menu list style is more compact than the style of an unordered list.

A menu list must begin with a `<MENU>` element which is immediately followed by a `<LI>` (list item) element:

```
<MENU>
<LI>First item in the list.
<LI>Second item in the list.
<LI>Third item in the list.
</MENU>
```

<DIR> <LI> </DIR>

## Directory List

A Directory List element is used to present a list of items containing up to 20 characters each. Items in a directory list may be arranged in columns, typically 24 characters wide. If the HTML user agent can optimize the column width as function of the widths of individual elements, so much the better.

A directory list must begin with the <DIR> element which is immediately followed by a <LI> (list item) element:

```
<DIR>
<LI>A-H<LI>I-M
<LI>M-R<LI>S-Z
</DIR>
```

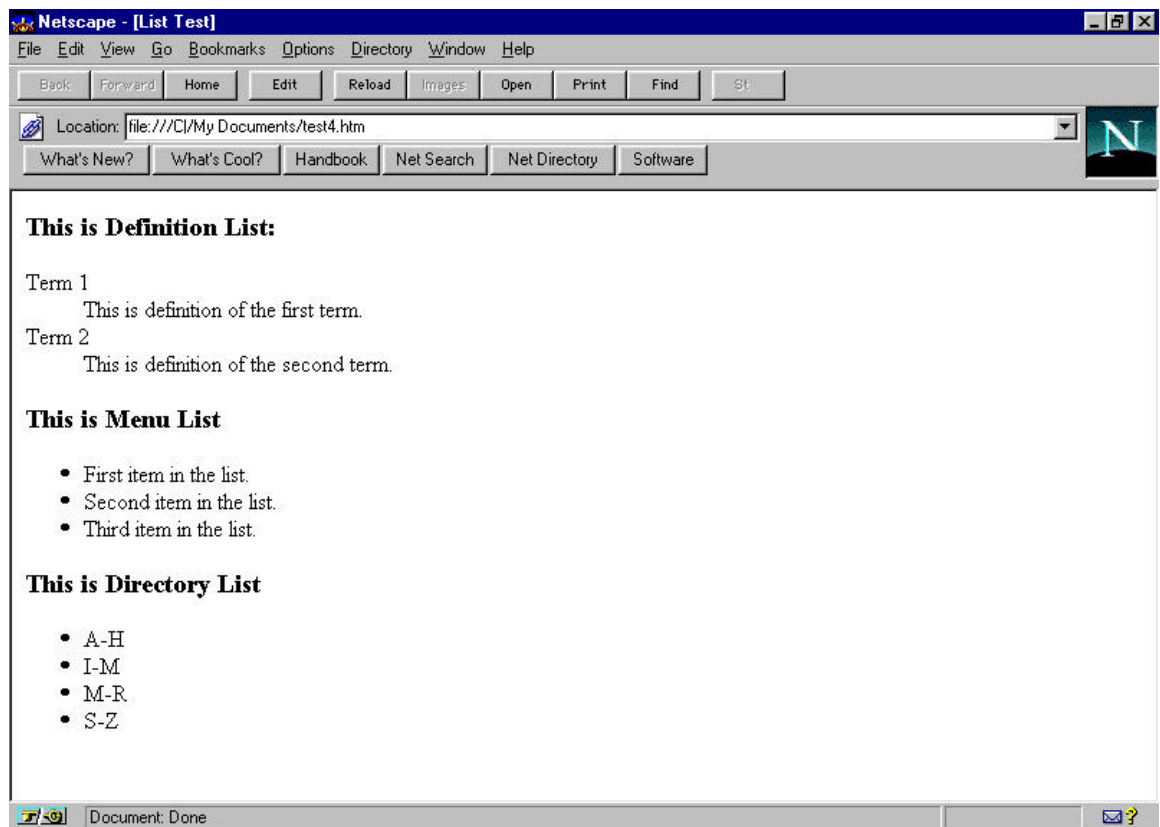


Fig. 5 Screenshot of Netscape. HTML document is:

```
<HTML><HEAD><TITLE>List Test</TITLE></HEAD>
<BODY>

<H3>This is Definition List:</H3>
<DL>
<DT>Term 1<DD>This is definition of the first term.
<DT>Term 2<DD>This is definition of the second term.
</DL>
```



```

<H3>This is Menu List</H3>
<MENU>
<LI>First item in the list.
<LI>Second item in the list.
<LI>Third item in the list.
</MENU>

<H3>This is Directory List</H3>
<DIR>
<LI>A-H<LI>I-M
<LI>M-R<LI>S-Z
</DIR>
</BODY></HTML>

```

## TABLES

<TABLE> </TABLE>

Define Table

This is the main wrapper for all the other table elements, and other table elements will be ignored if they aren't wrapped inside of a <TABLE> ... <TABLE> element. By default tables have no borders, borders will be added if the BORDER attribute is specified. At the time of writing, the <TABLE> element has an implied linebreak both before and after it. This is expected to change, allowing as much control over placement of tables as is currently available for the placement of images. Aligning them to various positions in a line of text, as well as shifting them to the left or right margins and wrapping text around them.

The <TABLE> element has the following attributes :

### BORDER

This attribute appears in the <TABLE> element. If present, borders are drawn around all table cells. If absent, there are no borders, but by default space is left for borders, so the same table with and without the BORDER attribute will have the same width.

\*BORDER=<value>\*

By allowing the BORDER attribute to take a value, the document author gains two things. First they gain the ability to emphasize some tables with respect to others, a table with a border of four containing a sub-table with a border of one looks much nicer than if they both share the same default border width. Second, by explicitly setting border to zero they regain that space originally reserved for borders between cells, allowing particularly compact tables.

\*CELLSPACING=<value>\*

This is a new attribute for the <TABLE> element. By default Netscape uses a cell spacing of two. For those fussy about the look of their tables, this gives them a little

more control. Like it sounds, cell spacing is the amount of space inserted between individual cells in a table.

**\*CELLPADDING=<value>\***

This is a new attribute for the <TABLE> element. By default Netscape uses a cell padding of one. Cell padding is the amount of space between the border of the cell and the contents of the cell. Setting a cell padding of zero on a table with borders might look bad because the edges of the text could touch the cell borders.

<TABLE BORDER=0 CELLSPACING=0 CELLPADDING=0>

gives the most compact table possible.

**\*WIDTH=<value\_or\_percent>\***

When this attribute appears in the <TABLE> element it is used to describe the desired width of this table, either as an absolute width in pixels, or a percentage of document width. Ordinarily complex heuristics are applied to tables and their cells to attempt to present a pleasing looking table. Setting the <WIDTH> attribute overrides those heuristics and instead effort is put into fitting the table into the desired width as specified. In some cases it might be impossible to fit all the table cells at the specified width, in which case Netscape will try and get as close as possible.

When this attribute appears on either the <TH> or <TD> element it is used to describe the desired width of the cell, either as an absolute width in pixels, or a percentage of table width. Ordinarily complex heuristics are applied to table cells to attempt to present a pleasing looking table. Setting the <WIDTH> attribute overrides those heuristics for that cell and instead effort is put into fitting the cell into the desired width as specified. In some cases it might be impossible to fit all the table cells at the specified widths, in which case Netscape will try and get as close as possible.

## <TD> </TD>

## Table Cell

This stands for table data, and specifies a standard table data cell. Table data cells must only appear within table rows. Each row need not have the same number of cells specified as short rows will be padded with blank cells on the right. A cell can contain any of the HTML elements normally present in the body of an HTML document. The default alignment of table data is ALIGN=left and VALIGN=middle. These alignments are overridden by any alignments specified in the containing <TR> element, and those alignments in turn are overridden by any ALIGN or VALIGN attributes explicitly specified on this cell. By default lines inside of table cells can be broken up to fit within the overall cell width. Specifying the NOWRAP attribute for a <TD> prevents linebreaking for that cell.

<TD ...> ... </TD> can also contain NOWRAP, COLSPAN and ROWSPAN attributes

### NOWRAP

If this attribute appears in any table cell (<TH> or <TD>) it means the lines within this cell cannot be broken to fit the width of the cell. Be cautious in use of this attribute as it can result in excessively wide cells.

### COLSPAN

This attribute can appear in any table cell (<TH> or <TD>) and it specifies how many columns of the table this cell should span. The default COLSPAN for any cell is 1.

#### ROWSPAN

This attribute can appear in any table cell (<TH> or <TD>) and it specifies how many rows of the table this cell should span. The default ROWSPAN for any cell is 1. A span that extends into rows that were never specified with a <TR> will be truncated.

#### <TR> </TR>

#### Table Row

This stands for table row. The number of rows in a table is exactly specified by how many <TR> elements are contained within it, irregardless of cells that may attempt to use the <ROWSPAN> attribute to span into non-specified rows. <TR> can have both the <ALIGN> and <VALIGN> attributes, which if specified become the default alignments for all cells in this row.

#### <TH> </TH>

#### Table Header

This stands for table header. Header cells are identical to data cells in all respects, with the exception that header cells are in a bold FONT, and have a default ALIGN=center. <TH ...> ... </TH> can also contain VALIGN, NOWRAP, COLSPAN and ROWSPAN attributes

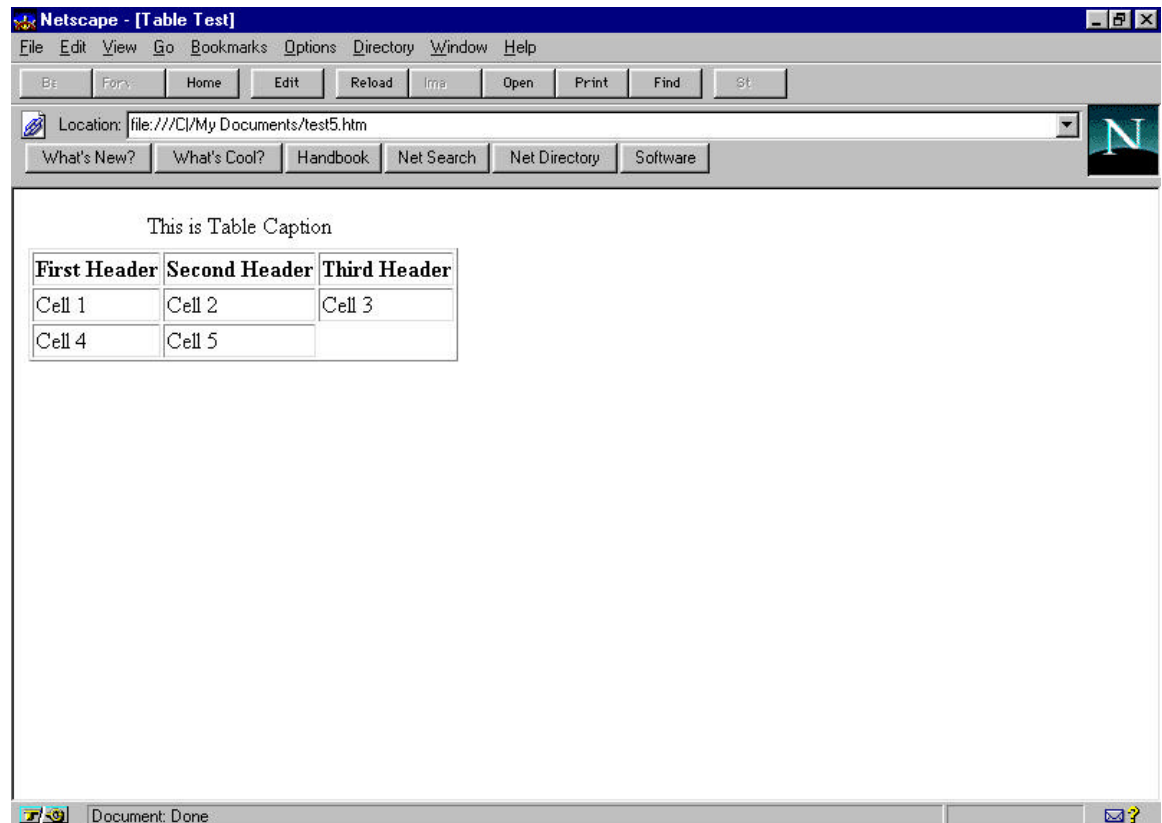


Fig. 6 Screenshot of Netscape. HTML document is:

```
<HTML><HEAD><TITLE>Table Test</TITLE></HEAD>
<BODY>

<TABLE BORDER>
<CAPTION> This is Table Caption </CAPTION>

<TR><TH>First Header</TH>
<TH>Second Header</TH>
<TH>Third Header</TH></TR>

<TR><TD>Cell 1</TD>
<TD>Cell 2</TD>
<TD>Cell 3</TD></TR>

<TR><TD>Cell 4</TD>
<TD>Cell 5</TD></TR>

</TABLE>
</BODY></HTML>
```

<CAPTION> </CAPTION>

Table Caption

This represents the caption for a table. <CAPTION> elements should appear inside the <TABLE> but not inside table rows or cells. The caption accepts an alignment attribute that defaults to ALIGN=top but can be explicitly set to ALIGN=bottom. Like table cells, any document body HTML can appear in a caption. Captions are always horizontally centered with respect to the table, and they may have their lines broken to fit within the width of the table.

## MISCELLANEOUS

<!-- Comment -->

Comment

To include comments in an HTML document that will be ignored by the HTML user agent, surround them with <!-- and -->. After the comment delimiter, all text up to the next occurrence of --> is ignored. Hence comments cannot be nested. White space is allowed between the closing -- and >, but not between the opening <! and --. For example:

```
<HEAD>
<TITLE> Guide: Recommended Usage</TITLE>
<!-- Id: Text.html,v 1.6 1994/04/25 17:33:48 connolly Exp -->
</HEAD>
```

NOTE: Some historical HTML user agents incorrectly consider a > sign to terminate a comment.